Utah Department of Transportation

Environmental Document (EA/EIS)
Design Process

June 2006

Table of Contents

Introduction

This document details the process for developing an Environmental Document, either an Environmental Assessment or an Environmental Impact Statement.

The following charts assume that a consultant has been retained to assist the Department in the preparation of the Environmental Document. If the Document is prepared internally, all responsibilities assigned to the Consultant should be construed as being the responsibility of the Region Environmental Manager.

Definitions and Acronyms Included in This Document

Consultant Services Administrator (CSA): The Consultant Services staff member assigned to the project.

Central Environmental: The Environmental Services staff member assigned to the project.

Community Relations: Community Relations staff.

Consultant: The Consultant team.

Environmental Lead: The Region Environmental staff member assigned to the project.

ePM: Electronic Program Management. UDOT's Web-based project and program management system.

Functional Manager: The person in charge of a functional organization, e.g. The Region Preconstruction Engineer, Region Construction Engineer, Region Operations Engineer, Structures Design Engineer, Geotech Engineer, Region Environmental Manager, Hydraulics Engineer, Environmental Services Director, etc.

PIC: The Region Public Involvement Coordinator.

PIN: The Project Identification Number. A project identifier used in Project Development and ePM.

Preconstruction Staff: The appropriate Region Preconstruction staff assigned to the project (Roadway Design, Hydraulics, Right-of-Way, Utilities, etc.)

Programming: The STIP Development Coordinator.

Project Manager: The Region Project Manager assigned to the project.

Traffic and Safety: Region and/or Central Traffic and Safety staff.

01E Initial Project Setup

Recommended Lead: Project Manager

Task	Responsible Parties			
	Project Manager	Programming	Functional Manager(s)	Central Environmental
Ensure That Project Is In A Funded Year	X			
Establish A PIN		X		
Obtain And Review Project File	X			
Confirm If The Project Will Require An EA Or An EIS	X		X	X
Determine Project Staffing Needs	X		X	
Set Up Project In ePM	X			

Ensure That Project Is In A Funded Year

The Project Manager checks ePM screen 710, PIN Tab, to confirm that Program Development has established a Project Identification Number (PIN) and that the project is funded in the current Fiscal Year. If not, e-mail the STIP Development Coordinator and request appropriate revisions.

Establish a PIN

If a PIN has not been established for the EA/EIS preparation, the Project Manager e-mails the STIP Development Coordinator and requests a new PIN. The STIP Development Coordinator will need to know:

- ❑ Project Description
- ❑ Project Location
- ❑ Funding source
- ❑ Fiscal Year
- ❑ Funds needed to complete the Document (approximate)

The STIP Development Coordinator creates a Master PIN for the project and assigns a PIN for the Environmental Document Preparation phase of the project. In addition, s/he assigns a Project Number and a Job/Project code (Job/Proj,) and opens the 20N and, if applicable, the 25N sub-phases of the Job/Proj.

In order for the STIP Development Coordinator to allocate any funds to the project, he will need Form R-709. The Project Manager should complete the form and e-mail it to the STIP Development Coordinator.

Obtain And Review Project File

The Project Manager contacts the Planning Division and requests the Project File(s) for the project. The Project Manager reviews all contents of the file and becomes familiar with them. At a minimum the file should contain:

- ❑ Public comments received to date
- ❑ General needs statement
- ❑ KAP (keeper of all promises)
- ❑ Traffic data
- ❑ General environmental information
- ❑ List of stakeholders
- ❑ Planning level cost estimates

The Project Manager also gathers and reviews any additional project information such as:

- ❑ Planning/Corridor Studies
- ❑ Concept Reports
- ❑ Existing environmental data for the area
- ❑ Public and Agency comments from planning/corridor studies
- ❑ Public and Agency comments from nearby projects

Confirm If The Project Will Require An EA Or An EIS

The Project Manager consults with FHWA, Central Environmental Staff, and Region Environmental Staff to confirm if the project requires an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). This may require a field review and/or Project File Review. For guidance on document types, refer to 23CFR771.

Determine Project Staffing Needs

The Project Manager, in consultation with the Region Preconstruction Engineer, the Region Environmental Engineer/Manager, and possibly others, determines what resources are needed for the project. They should take into account:

- ❑ Staff availability
- ❑ Staff expertise
- ❑ Project schedule
- ❑ Project budget

They decide what work will be contracted out and, for the work that stays in-house, which staff will accomplish it.

Set up Project in ePM

At this time the Project Manager should have enough information to set up the project in ePM Screen 450, “Network Selector/Activity Generator.”. The Project Manager may not have enough information to override any durations or hours, but s/he can choose the Simple, Average, or Complex option and can select EA or EIS.

03E Obtain Consultant Services

Recommended Lead: Consultant Services

Task	Responsible Parties		
	Project Manager	Consultant Services Administrator (CSA)	Consultant
Determine Type Of Consultant Selection (Standard RFQ)	X		
Prepare Request Documents	X		
Seek Approval Of R-709 (Authorization Of Funding)	X	X	
Develop RFQ – Hold Scoping Meeting	X	X	
Advertise RFQ		X	
Select Consultant	X	X	
Prepare Documents For Contract			X
Negotiate, Review, and Approve Documents	X	X	X
Prepare Contract, Seek Approvals, And Execute		X	

Determine Type Of Consultant Selection (Standard RFQ)

Under the current Memorandum of Understanding with FHWA for Consultant Selection, the majority of Environmental Document Preparation contracts require a Standard RFQ as opposed to a Streamlined RFQ. The Project Manager (PM) is responsible for initiating the Request for Qualifications.

Prepare Request Documents

The Project Manager prepares the following documents and submits them to the Consultant Services Administrator (CSA) to initiate the RFQ process:

- ❑ Request for Contract or Modification / Financial Screening Request Form
- ❑ R-709 - Authorization of Funding Request Form
- ❑ Draft Scope of Work

- ☐ Independent Cost Estimate (ICE) from ePM Screen 430
- ☐ Proposed Selection Team
- ☐ Updated screen prints of ePM Screen 505, "Cost Estimate"

Seek Approval Of R-709

The CSA forwards the R-709, Scope, and ICE to Systems Planning and Programming for funding approval. The RFQ cannot be advertised until the R-709 is approved.

Develop RFQ – Hold Scoping Meeting

The Selection Team (Project Manager, CSA, FHWA representative, and technical representatives) holds a Scoping Meeting to develop the RFQ, refine the Scope of Work, and determine the consultant selection schedule.

Advertise RFQ

The CSA advertises the RFQ in the local newspapers, posts it on the Consultant Services website, and issues a notification to the Consultant Services Email Subscriber Service.

Interested consultants submit a Statement of Qualifications (SOQ).

Select Consultant

The Selection Team reviews and scores submitted SOQ's. The CSA averages the scores and compiles the comments of the Selection Team.

The Selection Team meets and determines whether interviews are necessary based on the compiled scores/comments. If the first-ranked firm's score is clearly higher than the others, the Selection Team may recommend that the Project Manager proceed to negotiations without interviewing. If the first-ranked firm's score is not clearly higher than the others, interviews are required.

The Selection Team short-lists consultants for interviews based on the SOQ scores. The CSA arranges for interviews with the short-listed firms. Based on the interviews, a firm is selected. The Project Manager then proceeds to negotiations with the selected firm.

If the Project Manager cannot come to an agreement with the selected firm, the Project Manager notifies the CSA. The Project Manager and CSA may discontinue negotiations with the firm and start negotiations with the second-ranked firm. NOTE: The RFQ may be canceled at any time.

Prepare Documents For Contract

Based on the Scope of Work, Consultant's SOQ, and discussion, the consultant develops a work plan and prepares the documents required by Consultant Services for a contract:

- ❑ Executive Summary
- ❑ Work Plan
- ❑ QC/QA Checklist
- ❑ Staffing Plan
- ❑ Project Schedule
- ❑ Certificate of Insurance
- ❑ Cost Proposal
- ❑ Sub-Consultant information

Negotiate, Review, and Approve Documents

The Project Manager and CSA review the information provided by the consultant and negotiate revisions.

When the Project Manager approves, s/he forwards the documents prepared by the consultant to the CSA along with the following additional documents:

- ❑ Approval Memo
- ❑ Revised ICE
- ❑ Email justification of ICE revision
- ❑ Updated screen print of ePM Screen 505, "Cost Estimate"

The CSA reviews documentation for format and accuracy, then requests any revisions or supplemental information required.

Prepare Contract, Seek Approvals, And Execute

If the negotiated amount is more than 10% higher than the original R-709 amount, the CSA revises the R-709 (Authorization of Funding Request) and forwards it to UDOT Systems Planning and Programming for approval.

The CSA prepares the contract, seeks approvals from the appropriate UDOT officials, the Consultant, and the UDOT Comptroller's Office.

Once the contract has been approved, the CSA confirms the "R-709 Authorization of Funding Request" has been approved, and executes the contract with a Notice to Proceed.

The Consultant may not begin work on the contract until after the Notice to Proceed is issued by the CSA.

05E Develop Initial Public Involvement Plan

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	PIC	Consultant	Community Relations
Share Public Involvement Information From Planning	X	X	X	
Investigate Additional Stakeholders		X	X	
PI Kickoff Meeting: Establish Public Involvement Goals And Evaluation Criteria	X	X	X	
Develop Community Outreach Strategies	X	X	X	
Develop Media Plan	X			X

Purpose*:*

Establish an easy means for interested citizens (private and public) to provide input to the decision-making process and receive project information.

Share Public Involvement Information from Planning

The Consultant reviews all public involvement (PI) information obtained from Planning in Activity 01E, “Initial Project Setup.” The Consultant shares all pertinent stakeholder information with the entire project team. Items to be shared include:

- ❑ List of Stakeholders
- ❑ Public comments received to date

Investigate Additional Stakeholders

The Consultant meets with the Region Public Involvement Coordinator (PIC) and the Project Team to identify any further stakeholders they are aware of. Additionally, the Consultant contacts the stakeholders already identified and the recognized community leaders and requests the identification of other potentially interested stakeholders.

PI Kickoff Meeting: Establish Public Involvement (PI) Goals and Evaluation Criteria

The Consultant prepares a Draft PI Plan prior to this meeting that includes at a minimum:

- ❑ Interested Stakeholder list
- ❑ Community values and issues
- ❑ Potential committees and, if appropriate, roles of committees
- ❑ Potential outreach strategies
- ❑ Approximate public meeting schedule and budget
- ❑ Public Relations ideas

The Consultant leads and facilitates the Project Team in developing Public Involvement Goals and Evaluation Criteria for the project, implementing the UDOT Context Sensitive Solutions (CSS) Philosophy. In some cases, interested stakeholders should participate in this meeting to assist the Project Team in defining PI goals. The Project Manager, in collaboration with the Region PIC and the Consultant, makes the final decision on whether or not to include interested stakeholders in this meeting.

Develop Community Outreach Strategies

Develop outreach strategies to meet the objectives of the PI Plan.

Develop Media Plans

Effective media coordination will promote a better-informed public. The Consultant, in collaboration with the Region PIC and the Project Manager, discusses potential media strategies and opportunities with Community Relations.

07E Form Project Teams and Set Budgets

Recommended Lead: Project Manager

Task	Responsible Parties			
	Project Manager	Functional Manager(s)	Consultant	
Develop Project Scope	X	X	X	
Develop Project Schedule	X	X	X	
Develop Project Budget	X	X	X	
Quality	X	X	X	
Hold Project Kick-off Meeting	X		X	

Develop Project Scope

The Project Manager, in consultation with Region and Central staff, develops a detailed scope of the work to be accomplished by the project team. This includes not only the scope of work for the consultant, as negotiated in Activity 03E, but also an equally detailed scope of work for all internal units. The Scope of Work should define specific deliverables and Staff responsibilities.

Develop Project Schedule

The Project Manager, in consultation with Region staff, Central staff, and the Consultant, finalizes a Project Schedule. The parties agree upon durations for each project activity and update ePM.

Develop Project Budget

The Project Manager negotiates a budget with each Functional Manager for each project activity. For internal units this budget is set in hours. These hours are entered into ePM on Screen 220 as an override. Consultant costs are captured as dollars and should also be entered into Screen 220 under the Lump Sum column. Once all parties agree to the budget amounts and the activity duration, the Project Manager locks the Project Budget by clicking on the "Lock Budget" button on Screen 220.

Quality

Develop a QA/QC Plan

Hold Project Kick-off Meeting

Once a Consultant has been selected and retained, the Project Manager holds an Interdisciplinary Project Kick-off Meeting. Everyone involved in the preparation of the Document will be invited.

Potential Team Members

- ❑ Project Manager
- ❑ Preconstruction Engineer
- ❑ Region Environmental Engineer/Manager
- ❑ Region Environmental Lead
- ❑ Region Archeologist
- ❑ Region Landscape Architect
- ❑ Region Design Squad Leader
- ❑ Lead Designer (UDOT or Consultant)
- ❑ Region Right of Way Engineer
- ❑ Region Construction Engineer
- ❑ Resident Engineer
- ❑ Region Pavement Engineer
- ❑ Maintenance Area Supervisor
- ❑ Shed Foreman
- ❑ Region Traffic Engineer
- ❑ Region PIC
- ❑ Central PIO
- ❑ Pedestrian and Bicycle Coordinator
- ❑ Central Planner
- ❑ Central Traffic and Safety Engineer
- ❑ Central Environmental staff
- ❑ UDOT Wildlife Program Manager
- ❑ Central Right of Way Lead
- ❑ Central Bridge Engineer
- ❑ ATMS
- ❑ Consultant Project Manager
- ❑ Consultant Environmental Lead
- ❑ Consultant Design Leader
- ❑ Consultant Public Involvement Specialists
- ❑ Consultant Technical Leads
  - Traffic Modeling
  - Air Quality Modeling
  - Noise Modeling
  - TandE Specialist
  - Etc.

The purpose of the Project Kick-off Meeting is to introduce team members, describe the scope of the project, and come to consensus on and sign the Project Charter, the Project Communication Plan, the Project QC/QA Plan, the Project Budget, and the Project Schedule. All team members sign the Project Charter and the Project Communication Plan. UDOT Functional Leads agree to the Project Budget and the Project Schedule by “Locking” their activities in ePM. Prepare all QC/QA plans in advance of the meeting and review and modify as necessary at the meeting.

09E Generate Notice of Intent (NOI)

Recommended Lead: Environmental Lead

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Central Environmental
Prepare and Publish Notice of Intent		X	X	X

Prepare and Publish Notice of Intent

The consultant prepares a draft Notice Of Intent (NOI) consistent with the example in FHWA Technical Advisory T6640.8A, Appendix B. The Draft Notice of Intent is circulated for comment to the Region Environmental Lead and the Central Environmental Representative for review/comment. Incorporate the comments into the NOI.

The Region Environmental Lead submits the reviewed and revised NOI to FHWA, requesting the NOI be published in the Federal Register. If FHWA requires revisions to the NOI, it is the responsibility of the Region Environmental Lead to ensure that the appropriate changes are made. FHWA indicates when the NOI should be published in the Federal Register.

The Region Environmental Lead and the consultant ensure that the NOI was published in the Federal Register. A copy of the Notice and the date published is included as part of the project file. The Federal Register can be accessed by the following URL: http://www.gpoaccess.gov/fr/index.html.

11E Obtain Mapping and/or Photography

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Functional Manager(s)	Consultant	
Determine Mapping Needs	X	X	X	
Obtain Aerial Photography			X	
Obtain Ground Survey			X	
Prepare Base Maps/Photos		X	X	

Determine Mapping Needs

The Project Team determines what type of mapping or photography will be needed for the project. They should consider such things as:

- ❑ The level of accuracy needed
- ❑ The amount of design that will be accomplished during the Environmental phase
- ❑ Are there specific areas that need more detail than the rest of the project?
- ❑ The best way to present information to the public and other stakeholders
  - o Will the project make use of visual simulations?
  - o Are artistic renderings more appropriate?

Investigate whether there is any existing information that can be used for the project.

- ❑ Is existing aerial photography available from other sources such as the County or City, other State or Federal Agencies, or stock photography from an aerial photography firm?
  - o If so, how old is it? Have there been significant changes since it was taken?
  - o Is the resolution adequate?

- ❑ Is there existing mapping that can be used? As-builts, USGS maps, etc.?
  - o How old is it?
  - o How accurate is it?

If the team determines that existing mapping is not adequate for the project, they should determine what additional needs they have. This should be a specific list of areas, the type of data needed (aerial survey, ground survey, ortho-rectified aerial photography, oblique aerial photography, etc.,) required resolution or accuracy, and a time frame when the information will be needed.

Obtain Aerial Photography

Using the list generated above, the Project Manager arranges for a consultant to obtain additional aerial photography. If this work was not anticipated in the original contract, it may be a modification to the existing contract or a separate contract with an aerial photography firm.

Obtain Ground Survey

Using the list generated above, the Project Manager arranges for a consultant to obtain additional survey information. If this work was not anticipated in the original contract, it may be a modification to the existing contract or a separate contract with a surveying firm. All work should be done in accordance with UDOT's CADD Standards.

Prepare Base Maps/Photos

Data gathered in the above steps are compiled to form a base map or base photo suitable for use in Public Meetings, coordination with other agencies, and inclusion in the document.

13E Conduct NEPA Scoping

Recommended Lead: Consultant

Task	Responsible Parties					
	PIC	Project Manager	Environmental Lead	Consultant	Preconstruction Staff	Central Environmental
Solicit Comments from Agencies and The Public		X	X	X	X	
Send Scoping Letters				X		
Hold Scoping Meetings		X	X	X	X	X

Solicit Comments From Agencies And The Public

The purpose of this process is to determine the scope of the EIS so that preparation of the document can be effectively managed. Scoping is intended to ensure that problems are identified early and properly studied, that issues of little significance do not consume time and effort, that the draft EIS is thorough and balanced, and that delays occasioned by an inadequate draft EIS are avoided. The Project Team negotiates review durations with resource agencies. Identify co-lead, participating, and cooperating agencies.

Send Scoping Letters

Determine resource/land management agencies that may have interest in the project. Actively solicit comments from agencies. Send scoping letters soliciting comment to known interested parties (agencies and the public.)

Hold Scoping Meetings

Hold a public and agency NEPA Scoping meeting where resource/land management agencies attend and provide input. Items of interest may include: resources of interest in the project vicinity, specific concerns regarding the proposed action, preferred manner of consultation and coordination, projected level of effort for study, preferred analysis methods, potential alternatives, etc.

15E Develop Project Context and Transportation Needs

Recommended Lead: Consultant

Task	Responsible Parties					
	PIC	Project Manager	Environmental Lead	Consultant	Preconstruction Staff	Traffic and Safety
Analyze Infrastructure Conditions				X	X	
Develop Baseline of Current Transportation System				X	X	X
Analyze Existing and Future Traffic Conditions				X		X
Inform and Educate the Public and Obtain Public Input	X	X	X	X	X	
Develop Preliminary List Of Project Needs		X		X	X	X

Analyze Infrastructure Conditions

The purpose of this analysis is to identify substandard locations and deficiencies that may contribute to safety problems now and in the future.

- ❑ Perform a complete geometric review, including all FHWA Design Elements. Obtain and review structure inventory reports with the UDOT Structures Division.
- ❑ Obtain pavement condition information from the UDOT Regions or Planning.
- ❑ Gather utility information from utility companies to determine preliminary utility locations. Discuss any potential utility upgrades with the utility companies. Upon gathering utility information, determine if a Subsurface Utility Exploration (SUE) is necessary.

Develop Baseline of Current Transportation System

Utilizing the MPO Long Range Plans, UDOT Long Range Plans, and other appropriate Future Transportation Plans, develop and define a baseline transportation system for the No-Action Alternative.

Analyze Existing and Future Traffic Conditions

The purpose of this analysis is to identify existing traffic and safety deficiencies.

- ❑ Obtain all traffic crash data and accident data.
- ❑ Complete a traffic operation analysis. This includes the existing traffic conditions and future traffic conditions based on modeling projections of traffic for the design year (typically 20-30 years out). Utilize traffic modeling projections from UDOT Planning, MPO's, previous corridor studies, or if necessary, perform additional traffic modeling.
- ❑ Complete a technical report summarizing all traffic and safety analysis.

Inform and Educate the Public and Obtain Public Input

Ask the public a few specific questions like the following to help define the context of the project.

- ❑ What do you value
    - o about your community,
    - o about the natural and built environment,
    - o about the transportation facility ?

- ❑ From your perspective, do you see any need to improve the transportation facility?
- ❑ What are some potential solutions to the transportation problems?
- ❑ What are the transportation-related issues and concerns?

Develop Preliminary List Of Project Needs

Ask your team the following:

- ❑ What transportation problems does the community perceive?
- ❑ What are the needs of the natural and built environments?
- ❑ What are the community's land use plans?
- ❑ What are the transportation needs of the facility, both now and in the future? This includes all modes of transportation, including pedestrians and bicycles?
- ❑ What are the community goals for the transportation facility?
- ❑ What are the economic needs of the community, related to the transportation facility?
- ❑ What transportation improvements does the community believe are necessary, both now and in the future?

The transportation needs are different for each and every project.

17E Define Project's Purpose and Need (P & N)

Recommended Lead: Consultant

Task	Responsible Parties					
	Central Environmental	Project Manager	Environmental Lead	Consultant	Preconstruction Staff	Traffic and Safety
Establish Logical Termini			X	X	X	
Prepare Draft P&N Report			X	X	X	X
Obtain Public Input			X	X	X	
Obtain UDOT/FHWA Approval	X	X	X	X		

Establish Logical Termini

Logical Termini will be based on guidance in 23 CFR 771.111.

Prepare Draft P&N Report

Utilizing the technical analysis and information from Activity 15E , prepare a Draft Purpose and Need report in accordance with the technical guidance provided by the FHWA.

Obtain Public Input

Utilizing the best and most cost effective community outreach techniques developed from Activity 05E and established in other previous activities, at a minimum:

- ❑ Inform and educate the public on what the Purpose and Need for the project is.
- ❑ Involve the public to build consensus on Purpose and Need .

Obtain UDOT/FHWA Approval

UDOT Central and Region Environmental Staff and FHWA review and approve the draft Purpose And Need Report.

19E Identification and Initial Development of Alternatives

Recommended Lead: Consultant

Task	Responsible Parties					
	Project Manager	Environmental Lead	Consultant	Preconstruction Staff	Traffic and Safety	PIC
Develop Screening Criteria		X	X	X	X	X
Brainstorm Alternatives		X	X	X	X	
Obtain Public Input			X			
Development of Alternatives		X	X	X	X	
Screen Alternatives		X	X	X	X	
Obtain UDOT/FHWA Approval	X	X	X			

Develop Screening Criteria

Before brainstorming alternatives, develop screening criteria. Screening criteria will be used to eliminate or carry forward alternatives throughout the planning and design process. Typically, two or three sets of detailed screening criteria will be needed to complete screening of alternatives. Initial screening criteria should be fatal flaw and reasonable or feasibly oriented. Detailed screening criteria should be Purpose and Need oriented, including screening by level of service and other pertinent transportation measurements.

Brainstorm Alternatives

Brainstorming of alternatives should include as many team members and stakeholders as possible. It is extremely important to get all possible alternatives out on the table as early as possible, to allow time for proper screening and development of alternatives.

Obtain Public Input

Utilizing the best and most cost effective community outreach techniques developed from Activity 05E and established in other previous activities, at a minimum:

- Inform and educate the public on the preliminary project alternatives.
- As determined necessary by the Project Team, involve the public to build consensus on alternative development.

Development of Alternatives

Alternatives are developed sufficiently to evaluate performance and impacts. It is extremely important that all alternatives are developed equally to allow for fair Screening of the Alternatives. The Screening and Further Development of Alternatives process continues circularly, until the Project Team has concurred that all remaining alternatives are to be carried forward for full impact evaluation in Activity 25E.

Screen Alternatives

Screen alternatives based upon screening criteria.

Obtain UDOT/FHWA Approval

UDOT Central, Region Environmental Staff and FHWA review and approve the initial development of alternatives/draft alternatives chapter.

21E Environmental Resource Identification

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Collect/Compile General Environmental Data			X	
Determine Informational Needs		X	X	
Perform Investigations			X	
Provide Location Of Key Resources			X	

Collect/Compile General Environmental Data

Obtain existing environmental data from GIS layers, literature searches, previous projects, etc. Determine what is known. Resources of concern may include (but are not limited to):

Land Use	Noise	Threatened Or Endangered Species
Farmlands	Water Quality	Invasive Species
Social And Community Impacts	Wetlands	Historic And Archeological Preservation
Economic Impacts	Water Body Modifications	Hazardous Waste
Joint Development	Wildlife	Visual
Bike And Pedestrian Issues	Floodplains	Indirect And Cumulative Impacts
Air Quality	Wild And Scenic Rivers	Environmental Justice
Parks, Schools And Community Centers	Utility Relocation	Section 4(F) And Section 6(F)

Refer to the UDOT Environmental Process Manual of Instruction for additional sources, including the FHWA Technical Advisory and the UDOT Environmental Assessment Guidelines.

Set appropriate study area boundaries for each resource. In some cases, the study area boundary may be identical to the project area. Some resources require a broader study area to fully understand the effects project alternatives may have. Broader study areas are typically necessary when evaluating secondary and cumulative impacts.

Determine Informational Needs

Locate information gaps. These gaps may include: old data, general data, non-existent data. Develop detailed plans for gathering needed data. This may include coordination with appropriate resource agencies.

Perform Investigations

Qualified individuals perform all the necessary investigations and prepare appropriate reports.

Provide Location Of Key Resources

Map key resources (such as Section 4(f) properties or wetlands) to assist with alternative development and screening.

23E Section 4(f) Analysis

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Preconstruction Staff
Identify Section 4(f) Resources			X	
Determine Impacts From Alternatives		X	X	
Coordinate With Appropriate Agencies/Land Owners			X	
Develop Avoidance Alternatives		X	X	X
Develop Measures To Minimize Harm		X	X	

Identify Section 4(f) Resources

Locate all Section 4(f) resources in project study area. These may include: Historic buildings, canals, railroads, structures and archeological sites, public parks and recreation areas, wildlife and waterfowl refuges. Contact Lyle Bennett to determine if Section 6(f) properties exist in the project study area. If Section 6(f) properties exist in the project corridor, they are included as part of the Section 4(f) analysis. Take care to appropriately identify the property boundaries of the Section 4(f) resources.

Determine Impacts From Alternatives

Overlay property boundaries on alternatives. Determine if a property use occurs. List potential Section 4(f) properties affected by each alternative. With Environmental Assessments, programmatic Section 4(f) evaluations may be used, as appropriate. Programmatic Section 4(f) evaluations cannot be used with Environmental Impact Statements. De minimis can be applied to any project, regardless of document type.

Coordinate With Appropriate Agencies/Land Owners

Begin discussion with agencies having jurisdiction over potentially affected Section 4(f) properties. For privately owned historic and archeological sites, coordination normally takes place with the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP). These discussions help to refine Section 4(f) property boundaries and discuss needs. Discussions continue throughout the environmental document development.

Develop Avoidance Alternatives

Develop alternatives that avoid each and all section 4(f) properties impacted by alternatives. These can include: minor alignment shifts, a reduced facility, retaining structures, etc. Evaluate avoidance alternatives to determine if they are feasible and prudent.

Develop Measures To Minimize Harm

If it is not possible to develop an alternative that avoids all Section 4(f) resources and is also feasible and prudent, develop measures to minimize harm. The intent is to reduce the amount and type of impact to the properties to the extent possible. All possible measures should be explored and discussed. Appropriate measures to minimize harm are included as part of the project mitigation.

25E Determine and Analyze Impacts, Refine Alternatives as Necessary

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Preconstruction Staff
Determine Impacts		X	X	
Refine Alternatives As Necessary			X	X
Complete Preliminary Design			X	X

Determine Impacts

Compare project footprint with environmental resources and areas of concern. Determine where impacts may occur.

Refine Alternatives As Necessary

Where impacts to environmental resources are likely, evaluate potential alignment modification to avoid or minimize project impacts. Evaluate and document each location where impacts may occur for:

- ❑ Alignment modifications considered
- ❑ Effect of modifications on environmental impacts (eliminated, minimized, impacts to other resources, etc.)
- ❑ Were modifications adopted or eliminated, and justification for each decision.

Complete Preliminary Design

Complete the preliminary design to further evaluate alternatives carried forward.

27E Community Impact Analysis

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	PIC
Develop Plan		X	X	X
Hold Various Meetings			X	X
Evaluate Plan Effectiveness			X	X

Purpose

The purpose of a Community Impact Assessment is to gain an understanding of the different community values that may exist. It is done by a variety of methods, including the compilation of demographic data, but primarily from interactions with the public. The interaction methods should identify the varying "communities" that may exist in a project area. The methods also provide the community members with a mechanism to explain what elements of their community they value and what they perceive the effects the transportation project may have on them.

The desired outcome of CIA is to know the communities that are in the project area, understand their concerns, and have an open dialog with them.

Develop Plan

A Community Impact Analysis Plan is created, identifying the goals associated with public involvement activities. This plan should take into account the context of the project area and utilize information from 05E and 15E. If the public committees are set up, the role and function of each committee should be clearly defined. The plan should also describe what activities and resources will be used to determine Environmental Justice populations and impacts, as well as community cohesiveness.

Hold Various Meetings

Prepare for and hold the public meetings and other activities described in the plan. These can include public information meetings, public advisory committees, and meetings with city/county officials. It may also include neighborhood surveys. Each meeting and activity should be evaluated to determine if it met the prescribed goal.

Evaluate Plan Effectiveness

This evaluation takes place over the entire activity. Determine if community impact analysis goals and informational needs are being met. Adjust the plan as necessary.

29E Prepare Administrative Draft Document

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Prepare Draft Document		X	X	
QC/QA			X	

Prepare Draft Document

- ❑ Develop outline. See EA guidance document.
- ❑ Purpose and Need
  - o Compile information from Activity 17E and utilize guidance found in FHWA Technical Advisory T6640.8a, UDOT's Guidance on Purpose and Need, and UDOT's Environmental Process Manual of Instruction. This chapter outlines what transportation issues the project intends to resolve and why it is important that they be resolved.
- ❑ Alternatives
  - o Compile information from Activities 19E and 25E. Utilize the same guidance listed above. Include a discussion of the criteria developed to evaluate the alternatives and a description of each alternative evaluated in the document. Include a discussion of the alternatives considered but dismissed, with a brief explanation of why they were dismissed.
- ❑ Affected Environment and Environmental Consequences
  - o Compile information from Activity 21E. The Affected Environment chapter includes a description of what is present in the project area.
  - o The Environmental Consequences chapter outlines the probably direct, secondary, and cumulative impacts that each alternative (including the no-build) will have on each resource category. Include potential and proposed mitigation measures for each resource category impacted by the project.
- ❑ Prepare other chapters
  - o Other chapters could include: Section 4(f) Evaluation, List of Preparers, List of Agencies, Organizations And Persons To Whom Copies Of This Statement Are Sent, Comments and Coordination, etc. All chapters should be reviewed for consistency of message and voice.

- ❑ Compile Appendix
- ❑ Compile appropriate reports from Activity 21E and prepare document appendix.
- ❑ Summarize mitigation requirements

QC/QA

Preparer completes both a QC and a QA review of the document prior to submission to UDOT. An independent legal review may be appropriate. Preparer demonstrates the QC/QA process to UDOT staff.

31E UDOT Quality Control/Quality Assurance (QC/QA)

Task	Responsible Parties			
	Project Manager	Environmental Lead	Central Environmental	Consultant
Perform QC		X		
Perform QA			X	
Submit Comments to Preparer		X	X	
Address Comments				X

Perform QC

Quality Control is performed by someone with NEPA experience who is not directly involved with other elements of the project.

Review the entire document for completeness and accuracy. Confirm each reference to figures. Check each table to ensure that it does not conflict with text. Check conclusions to ensure that the data supports them.

The Region Environmental Lead is responsible to ensure that QC takes place. UDOT Environmental Services may be a resource.

Perform QA

Quality Assurance consists of a brief review to ensure that Quality Control has taken place and that all document components are present.

Submit Comments to Preparer

UDOT provides the preparer with the comments resulting from the QC and QA reviews

Address Comments

The Consultant demonstrates that they have received and reviewed all comments and how they have addressed each comment.

33E Pre-Legal Sufficiency Review

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Central Environmental
Forward Document to FHWA for Review		X	X	X
Address Comments		X	X	

Forward Document to FHWA for Review

Prior to releasing the document to the public, FHWA legal staff ensures that the document is legally sufficient. This applies to all Environmental Impact Statements. It also applies to Environmental Assessments that have a non-programmatic Section 4(f) evaluation.

The administrative draft document is forwarded to FHWA via UDOT Central Environmental with the request that a pre-legal sufficiency review takes place. FHWA will forward document to its legal staff. Comments are normally received in 30 days.

Address Comments

When comments are received, make any corrections or additions as needed. Determine what additional coordination with FHWA is necessary to gain approval for public release of the document.

35E Conduct Public Hearing

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Central Environmental
Prepare For Public Hearing (Including Mock Hearing)	X	X	X	
Obtain Hearing Approval		X		X
Advertise/Prepare For Hearing			X	
Circulate Document And Hold Public Hearing			X	

Prepare For Public Hearing (Including Mock Hearing)

Arrange for the public hearing. Select a location that is appropriate for the hearing. Ensure that it is located in the project area and is accessible to the public and will provide a comfortable atmosphere. Ensure that it is large enough to accommodate displays and the expected attendance and meets ADA compliance requirements.

Obtain Hearing Approval

Request approval from UDOT Central Environmental to hold the public hearing.

Advertise/Prepare For Hearing

Advertise the hearing in accordance with FHWA and State of Utah regulations. The first advertisement is placed at least 15 days prior to the hearing date. The second advertisement is placed 7-10 days prior to the hearing date. Invite the appropriate Transportation Commissioner. Obtain a court recorder.

Contact Central Environmental for advertising requirements. Schedule the hearing location and prepare displays.

Environmental Assessments have a minimum 30-day comment period; that is the comment period ends no sooner than 30 days from the date the first advertisement appears in the newspaper(s.) Environmental Impact Statements have a minimum 45-day comment period.

Circulate Document and Hold Public Hearing

Upon receiving approval from UDOT Central Environmental and/or FHWA, the draft document is made available for public review and comment. At least two separate newspaper advertisements announce the availability of the document. Advertisements are placed in major and local newspapers, announcing the availability of the document, where it can be reviewed or obtained, where to send comments, when the comment period ends, and the Public Hearing date.

Make hard copies of the document available. Typically, copies are placed in libraries and other public venues. Copies of the document can be placed with copy stores, allowing the public to purchase copies of the document, if interested.

Send copies of the document to cooperating and affected state and federal agencies, local jurisdictions, non-governmental organizations, members of the public who have requested copies, and to Utah's Resource Development Coordination Committee (RDCC) (to Carolyn Wright.)

Make electronic copies of the document available, either on computer disc or on the Internet.

37E Public and Agency Draft Document Review

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Document Review Criteria		X	X	

Document Review Criteria

Environmental Assessments have a minimum 30-day comment period; that is, the comment period ends no sooner than 30 days from the date the first advertisement appeared in the newspaper(s.) Environmental Impact Statements have a minimum 45-day comment period.

38E Implement Public Involvement Plan

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	PIC	Consultant	Community Relations
Implement Public Involvement (PI) Plan	X	X	X	
Evaluate The Effectiveness Of Each PI Technique	X	X	X	
Refine PI Plans	X	X	X	

Implement Public Involvement (PI) Plan

The Consultant leads and facilitates the Project Team in implementing the PI Plan developed in Activity 05E. It is imperative that PI, as the cornerstone of our UDOT CSS Philosophy, remain effective and continuous throughout the planning and design process.

Evaluate The Effectiveness Of Each PI Technique

The Consultant, in collaboration with the PIC and Project Manager, evaluates all community outreach techniques used for both efficiencies and effectiveness.

Refine PI Plans

It is imperative that the PI plan be refined and remain flexible throughout the planning and design process, in order to ensure that the most effective outreach techniques for the project are used and that ineffective or inefficient techniques are not continued.

39E Select Preferred Alternative

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Select Preferred Alternative	X	X	X	

Select Preferred Alternative

Select the preferred alternative based upon the following criteria:

- ❑ Addressing the purpose and need of the project
- ❑ Environmental impacts
- ❑ Public support

For EIS documents, the preferred alternative may be selected prior to the public hearing. If so, it should be identified in the draft document. The preferred alternative must be selected and identified in the final EIS.

For EA documents, the preferred alternative is selected and identified in the draft document circulated for the public hearing.

A preferred alternative recommendation is made to UDOT Region and Central Environmental staff and FHWA for their concurrence. A summary and comparison of the impacts and benefits of each alternative is prepared.

41E Respond to Public and Agency Input

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Compile And Respond To Comments		X	X	

Compile And Respond To Comments

Compile all comments received from agencies and the public. The comments may be written and received through the mail or during the public hearing. Comments will also be received from the transcript of the public hearing. Copies of each comment, copies of each newspaper advertisement, and the court reporter transcript are compiled and submitted to the UDOT Region Environmental Engineer/Manager to certify the public hearing. A copy of the public hearing certification package (certification letter, copies of advertisements, written comments, and hearing transcript) is forwarded to FHWA for their project file.

Review the comments carefully and prepare responses, as appropriate. Proposed responses are reviewed by the project team and, when complete, incorporated into the final document.

43E Legal Sufficiency Review

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Central Environmental
Submit To FHWA Legal Section		X	X	

Submit To FHWA Legal Section

This applies to documents already submitted for pre-legal sufficiency reviews (Activity 31E).

The draft document is sent to FHWA via UDOT Central Environmental to be forwarded to their legal section. The FHWA lawyers will review the document and either provide additional comments or grant legal sufficiency. If comments are received, they are addressed and incorporated into the final document.

45E Prepare Final EIS

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Edit Final EIS		X	X	
QC/QA			X	

Edit Final Environmental Impact Statement

There are three potential approaches to finalizing the EIS. Coordinate the decision with the Project Team and FHWA.

1. Traditional Approach – The FEIS incorporates the DEIS with changes made as appropriate throughout the document to reflect:

    - the selection of an alternative
    - modifications to the project
    - updated information on the affected environment
    - changes in the assessment of impacts
    - the selection of mitigation measures
    - wetland and floodplain findings
    - the results of coordination
    - comments received on the DEIS and the responses to these comments.

2. Condensed FEIS – This approach avoids repetition of material from the DEIS by incorporating the DEIS by reference. The FEIS is thus a much shorter document than under the traditional approach; however, it should afford the reader a complete overview of the project and its impacts on the environment. Refer to FHWA Technical Advisory T6640.8A (Section VI, Part B) for more information.

3. Abbreviated FEIS – Refer to FHWA Technical Advisory T6640.8A (page 40) for more information.

QC/QA

Preparer completes both a QC and a QA review of the document prior to submission to UDOT. It may be appropriate for an independent legal review to be performed.

Preparer demonstrates the QC/QA process to UDOT staff.

47E UDOT QC/QA of Final Document

Task	Responsible Parties			
	Project Manager	Environmental Lead	Central Environmental	Consultant
Perform QC		X		
Perform QA			X	
Submit Comments to Preparer		X	X	
Address Comments				X

Perform QC

Quality Control is performed by someone with NEPA experience who is not directly involved with other elements of the project.

Review the entire document for completeness and accuracy. Confirm each reference to figures. Check each table to ensure that it does not conflict with text. Check conclusions to ensure that the data supports them.

The Region Environmental Lead is responsible to ensure that QC takes place. UDOT Environmental Services may be a resource.

Perform QA

Quality Assurance consists of a brief review to ensure that Quality Control has taken place and that all document components are present.

Submit Comments to Preparer

UDOT provides the preparer with the comments resulting from the QC and QA reviews.

Address Comments

Consultant demonstrates that they have received and reviewed all comments and how each comment has been addressed.

49E Submit for Decision

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Prepare Draft Decision Document and Submit To FHWA		X	X	

Prepare Draft Decision Document and Submit To FHWA

Prepare a summary of the preferred alternative and the effects the project is projected to have on the environment. Make a recommendation regarding the significance of the impacts. If the impacts are believed to be significant, preparation of an EIS is appropriate.

If the impacts are determined not to be significant, prepare a summary of the project, purpose and need, alternatives, impacts, and all mitigation commitments. This can take the form of a matrix. Submit the summary electronically to FHWA through UDOT Central environmental staff.

FHWA prepares the decision document. This normally takes from 1 –3 weeks.

51E Public and Agency Final Document Review

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Advertise and Make Document Available		X	X	

Advertise and Make Document Available

Advertise the availability of the Final Environmental Impact Statement in the statewide newspapers and any relevant local newspapers. Make the document available as specified in Activity 35E. The document is also forwarded to appropriate resource agencies and the previously identified public.

The document is available for review for a period of at least 30 days from the date of the advertisement. It is not required to solicit comments on the FEIS. If comments are received by the project team, the team should consider providing a response to the commenter. FHWA provides some guidance in T6640.8a.

53E Submit for Record of Decision (ROD)

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	
Prepare Support Documentation For The ROD and Submit To FHWA		X	X	

Prepare Support Documentation For The ROD and Submit To FHWA

Summarize the preferred alternative and effects the project will have on the environment, as well as any mitigation commitments. Format and content are outlined in FHWA T6640.8A. Submit electronically to FHWA and they will prepare the actual Record of Decision.

55E Develop Concept Report

Task	Responsible Parties			
	Project Manager	Preconstruction Staff	Consultant	
Assemble Information and Produce Concept Report		X	X	
Develop Concept Estimate		X	X	
Finalize Concept Report	X			

Assemble Information and Produce Concept Report

The Design Engineer or Consultant compiles the Draft Concept Report based on the Preferred Alternative.

Develop Concept Estimate

Finalize a concept level estimate using the concept report estimating spreadsheet.

Finalize Concept Report

Distribute the draft concept report to all team members to review for completeness and accuracy. The final concept report must be signed by the Region Preconstruction Engineer and the Project Manager recommending it for approval. The report is then submitted to the Region Director, who signs and approves the Final Concept Report.

Submit a copy to the Region STIP Workshop Coordinator.

57E Maintain Administrative Record

Recommended Lead: Consultant

Task	Responsible Parties			
	Project Manager	Environmental Lead	Consultant	Legal Counsel
Develop Administrative Record Organizational System			X	X
Maintain Administrative Record			X	

Develop Administrative Record Organizational System

The administrative record contains all correspondence, meeting minutes, technical documents and bulletins, clearance memos, mitigation commitments, decisions and environmental document drafts. It should be organized in such a way so that the history of the project is made clear, and decision points (and the basis for those decisions) are readily available.

Maintain Administrative Record

The intent of the administrative record is to maintain a historical record of the project and its progress. It also is a necessary reference should the project go to trial. It is often useful to engage an attorney to assist in developing and organizing the administrative record. You can contact the Agency Counsel at the AG Office.